

Work Order ID 135824

135824

RH

Ship Sept 3rd

August 20, 2015 2:35:53 PM

Page 1

Item ID: D206-642-251

Accept

N19000040100

Setup Start *NS1*

Revision ID:

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Stop *NS2*

Start Date: 8/20/2015 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: SA Date: 0150824 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3804	A (DEO)
IIN-D206-642	Q

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Doc. Control -USB or Paperwork Photocopy bluefile & type labels per PPP D206-642-251 CHG003

N/A

QA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

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Work Order ID 135824

August 20, 2015 2:35:53 PM

135824

Page 2

Item ID: D206-642-251 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH
 Start Date: 8/20/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 8/31/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1-Deburr Fwd edge of tube								
	2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804								
	3-Weld Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required. Pick: Qty Part Number Description Batch A/R Aluminum Rod <u>M131562</u>								
	4-Grind weld flush to cap on top surface only.								
	5-Cut Aft end as per dwg D3804 from front of tube and Deburr								
	6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D3804								
	7-Open holes for Aft end cap as per Dwg D3804 with #30 Drill Bit using DT8025.								
	8-Drill pilot holes using Dt 8167, including #30 pilot at 1.25" from 15.450". Most fwd x-bolt hole must be laid out manually at 78.04".								
	9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.								
	10- Drill D3286-1 doubler rivet holes in tube using # 40 drill, spot drilling doubler at the same time.								

> Doc 15-8-24

> 8215-08-24

> 15-8-24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By			
Root Cause				FAULT CATEGORY							
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Page 3

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Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D3804

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

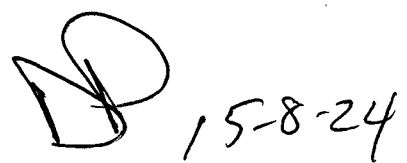
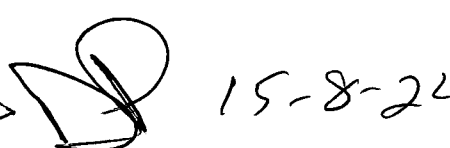
14-Remove indexing edge using DT8741 as per Dwg D3804. Leave 0.070" wall minimum.

15-C'sink GHW rivet holes as per Dwg D3804

16- Ream crossbolt holes to finish size as per dwg. ***DO NOT OPEN X-BOLT HOLES OF DETAIL "B".***

17- Open Aft cap hole #6.
****no wearplate holes for this skidtube****

18- Deburr tube and blow out chips from inside the tube



DQA: _____ Date: _____



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Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																							
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																							
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Misidentified ☐	Past Due ☐	OTHER : _____																																																																										

Work Order ID 135824

135824

Page 4

August 20, 2015 2:35:53 PM

Item ID: D206-642-251

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Stop ***NS2***

Start Date: 8/20/2015 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC - Inspect dimensions to drawing	0.00							DAS 38 9-89
120									
QC	Memo	0.00							

Quality Control

AUG 25 2015

140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							

Hand Finishing

[Signature] 15-8-25

150	QC7-Inspect Chemical Conversion Coat	0.00							
150									
QC	Memo	0.00							

Quality Control

[Signature] 15-8-25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Work Order ID 135824***135824***

Page 5

August 20, 2015 2:35:53 PM

Item ID: D206-642-251

Accept

N19000040100Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Stop ***NS2***Start Date: 8/20/2015 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

0.00

160

Skidtubes

Skidtubes

Memo

0.00

1-Open holes to finished size to detail "B" as per Dwg D3804, (without cutting fluid)

2-C'sink ONE crossbolt spacer hole as per Dwg D3804 (Detail B)(without cutting fluid)

3-Deburr and blow out all chips from inside the tube

15-8-25

170

QC6- Inspect dimensions to drawing

0.00

170

QC

Memo

0.00

Quality Control

1 0 15-08-25

DAS
18
8-25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
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Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :																							
Misidentified ☐	Past Due ☐																								

Work Order ID 135824***135824***

Page 6

Item ID: D206-642-251

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Stop ***NS2***Start Date: 8/20/2015 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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180

0.00

180

Skidtubes

Skidtubes

Memo

0.00

1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required

2-Bond D2654-3 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting

Start Date: 15-8-25 Time: 1030 AM

Finish Date: _____ Time: _____

Pick:

Qty Part Number Description Batch

A/RSikaflex-291 M132705Sikaflex expire date: 16-2-12

190

QC5- Inspect part completeness to step on W/O 0.00

190

QC

Memo

0.00

Quality Control

DAS
18
9-891 0 15-08-27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 135824

August 20, 2015 2:35:53 PM

135824

Page 7

Item ID: D206-642-251

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Stop ***NS2***

Start Date: 8/20/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

0.00

200

Skidtubes

0.00

Skidtubes

Memo

1-Remove alodine per DEO detail B from around hole and prepare for welding

2-Prep per QSI 005 and Insert one D2649 crossbolt spacer. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

QtyPart NumberDescriptionBatch

A/RAluminum Rod M131562

3-Grind welds flush as per Dwg D3804.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3804. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/RSS Rod NONE

5-Insert D4720-1 Spacer. Swage to 0.313" X 0.75" DP per QSI 002. Trim and grind flush per QSI 002

6- Install D2680-041 Nut Plate as per Dwg D3804

7- Deburr

BE15082715-8-27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Work Order ID 135824***135824***

Page 8

Item ID: D206-642-251

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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220	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
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220

QC Memo

0.00

Quality Control

① 15-08-27 PD

230	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

230

QC Memo

0.00

Quality Control

1 2B 15-08-28

240	Pressure Wash per QSI005 4.3	0.00							
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240

HandFinish Memo

0.00

Hand Finishing

1 15-8-31

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																															
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Work Order ID 135824

135824

Page 9

August 20, 2015 2:35:53 PM

Item ID: D206-642-251

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Stop ***NS2***

Start Date: 8/20/2015 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

250

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

250

M 131545

1 @ 15.8-31. DAS 34 9-89

Powdercoat

Memo

0.00

Powder Coating

Make sure Nut Plate Thread is protected using paint screw, and mask GHW studs.

START TIME:

10:25

OVEN TEMPERATURE:

320°

FINISH TIME:

10:55

260

QC3- Inspect Part Finish

0.00

260

QC

Memo

0.00

Quality Control

1x of 11 15/09/02

**DAS
15
9-89**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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OTHER : ☐																					

Work Order ID 135824***135824***

Page 10

August 20, 2015 2:35:53 PM

Item ID: D206-642-251

Accept

N19000040100Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Stop ***NS2***

Start Date: 8/20/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	HandFinishing	0.00							
270									
HandFinish	Memo	0.00							
Hand Finishing	1-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D3804. Clean excess adhesive.								
280	HandFinishing	0.00							
280									
HandFinish	Memo	0.00							
Hand Finishing	1-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive A/RSikaflex-291 <u>M132705</u> Sikaflex expire date: <u>16162</u>								
	2- Install wearplate as per dwg <u>RTU 598 M131211 16111</u>								
	2-Wing Walk as per Dwg D3804 and QSI 005 4.4 Batch: <u>M132599</u>								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
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								QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____	
Misidentified ☐	Past Due ☐																																																														

Work Order ID 135824

135824

Page 11

August 20, 2015 2:35:53 PM

Item ID: D206-642-251 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH
 Start Date: 8/20/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 8/31/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
290 *290* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				1			DAS 38 9-89 SEP 03 2015
300 *300* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				1			DAS 38 9-89 SEP 03 2015
310 *310* Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPP D206-642-251 Location: _____ PPP Rev: _____	0.00 0.00							DAS 02 9-89 SEP 03 2015

PPP B 135819

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐			
		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐			
		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Work Order ID 135824***135824***

Page 12

August 20, 2015 2:35:53 PM

Item ID: D206-642-251

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
320	QC21- Final Inspection - Work Order Release	0.00							
320									
QC	Memo	0.00							
Quality Control									

15/9/3

MF
15-9-03

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval			
Root Cause		FAULT CATEGORY									
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____									
Misidentified ☐	Past Due ☐										

August 20, 2015 2:36:13 PM

135824

D206-642-251

Required Date: 8/31/2015

Required Qty: 1.00

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4720-1 *D4720-1* Spacer		Manufactured	No			200	Each	150.0000	19	19			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG001				150					
				29566				150					
D2620 *D2620* Skidtube, 206 Skidtube		Manufactured	No			110	Each	10.0000		1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG002				10					
				126930				1					
				135726				4					
				135727				5					
D3286-1 *D3286-1* Doubler		Manufactured	No			110	Each	21.0000	2	2			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG001				21					
				91158				21					
D2647 *D2647* Cap		Manufactured	No			110	Each	18.0000		1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG001				18					
				134879				18					

Picklist Print

August 20, 2015 2:36:13 PM

Page 2

Work Order ID: 135824

135824

Parent Item: D206-642-251

D206-642-251

Parent Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015

Required Date: 8/31/2015

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-04

Purchased No

180 Each

211.0000

52

52

CR3212-4-04

Cherry Rivet

**

DP 15-8-25

Location

Loc Qty

Loc Code

CCK004

162

m132317

162

LG001

49

m126534

49

D2654-3

Manufactured No

180

Each

5.0000

1

D2654-3

Web

**

DP 15-8-25

Location

Loc Qty

Loc Code

LG002

5

112279

1

115653

4

D2649

Manufactured No

200

Each

102.0000

1

1

D2649

Cross Bolt Spacer

**

DP 15-8-25

Location

Loc Qty

Loc Code

LG

20

131103

20

LG001

82

132730

82

D3286-3

Manufactured No

200

Each

68.0000

2

2

D3286-3

Spacer

**

DP 15-8-25

Location

Loc Qty

Loc Code

LG001

68

109097

31

91160

37

August 20, 2015 2:36:14 PM

Shop Packet Print

Page 2

Picklist Print

August 20, 2015 2:36:14 PM

Page 3

Work Order ID: 135824

135824

Parent Item: D206-642-251

D206-642-251

Parent Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015

Required Date: 8/31/2015

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3 CCR264SS-3-03 Purchased No

CCR264SS3-3

Cherry Rivet

CR3212-4-03

Purchased No

CR3212-4-03

Cherry Rivet

M128606

Each

0.0000

** (2) 2 15-8-27

** 2 15-8-27

(2) 1 15-8-27

** 1 15-8-27

(1) 1 15-8-27

** 1 15-8-27

(1) 1 15-8-27

** 1 15-8-27

(1) 1 15-8-27

D2680-041 Manufactured No

D2680-041

Nut Plate

Location

Loc Qty

Loc Code

CCK004

500

16.0000

119017

500

Each

Location

Loc Qty

Loc Code

LG

16

16

270

Each

7.0000

129083

D3805-043 Manufactured No

D3805-043

Run-on Landing Wearplate Fwd

Location

Loc Qty

Loc Code

FP001

3

134607

3

FP002

4

109265

3

134607

1

270

Each

3.0000

D3805-047 Manufactured No

D3805-047

Run-on Landing Wearplate Aft

Location

Loc Qty

Loc Code

FP001

3

133199

3

August 20, 2015 2:36:14 PM

Shop Packet Print

Page 3

Picklist Print

August 20, 2015 2:36:14 PM

Page 4

Work Order ID: 135824

135824

Parent Item: D206-642-251

D206-642-251

Parent Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015

Required Date: 8/31/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-37A

Purchased

No

270

Each

35.0000

7

7

AN3-37A

Bolt

**

ll 1st 08/02

Location

Loc Qty

Loc Code

FG

10

119086

10

FP001

14

m130325

14

ST347

11

m130466

11

X7

NAS1149C0332R

Purchased

No

270

Each

4,913.000

7

7

NAS1149C0332R

WASHER

**

ll 1st 08/02

Location

Loc Qty

Loc Code

FP001

2140

m130325

2140

GA

221

m131618

221

ST260a

2000

m132930

2000

ST271

552

m129390

72

m132262

480

X7

Picklist Print

August 20, 2015 2:36:14 PM

Page 5

Work Order ID: 135824

135824

Parent Item: D206-642-251

D206-642-251

Parent Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015

Required Date: 8/31/2015

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

270

Each

1,353.000

7

7

MS21042L3

Nut

all 15/09/02

Location

Loc Qty

Loc Code

FP001

393

M130922

393

GA

264

M131317

264

ST305

696

116549

12

126333

49

M128754

2

M132123

17

M132382

2

M132883

114

M132930

500

✓

D3873-1

Manufactured

No

270

Each

18.0000

14

14

D3873-1

Bushing

X

all 15/09/02

Location

Loc Qty

Loc Code

FP001

2

126709

2

ST063

16

134885

16

11/135921

✓

Picklist Print

August 20, 2015 2:36:15 PM

Page 6

Work Order ID: 135824

135824

Parent Item: D206-642-251

D206-642-251

Parent Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015

Required Date: 8/31/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0332J

Purchased

No

270

Each

2,078.000

2

2

NAS1149D0332.J

Washer

all 15/09/16

Location

Loc Qty

Loc Code

CA

14

m129682

14

GA

568

m132677

568

ST269

1496

m130325

900

m131624

44

m132677

552

x2

MS27039-1-08

Purchased

No

270

Each

716.0000

2

2

MS27039-1-08

Screw

all 15/09/16

Location

Loc Qty

Loc Code

CA

96

m128636

96

FP001

363

m128636

363

GA

2

125654

2

ST285

255

m128636

255

x2

D2651-1

Manufactured

No

270

Each

164.0000

8

8

D2651-1

Plug

all 15/09/16

Location

Loc Qty

Loc Code

FP001

164

131695

30

132398

14

134571

120

x2

August 20, 2015 2:36:15 PM

Shop Packet Print

Page 6

Picklist Print

August 20, 2015 2:36:15 PM

Page 7

Work Order ID: 135824

135824

Parent Item: D206-642-251

D206-642-251

Parent Item Name: Replacement Skidtube, High Gear with Run-on Landing Wearplates Fits LH or RH

Start Date: 8/20/2015

Required Date: 8/31/2015

Start Qty: 1.00

Required Qty: 1.00

D2651-3

Manufactured No

270

Each

224.0000

8

8

D2651-3

O-Ring

**

ll 12/09/02

Location

Loc Qty

Loc Code

FP001

224

113577

16

120110

208

x

MS27039-4-06

Purchased

No

270

Each

100.0000

1

1

MS27039-4-06

Screw

**

ll 12/09/02

Location

Loc Qty

Loc Code

FP001

95

m132317

95

ST283

5

m126534

5

x1

NAS1149D0463J

Purchased

No

270

Each

2,760.000

1

1

NAS1149D0463.J

WASHER

**

ll 12/09/02

Location

Loc Qty

Loc Code

GA

41

M129390

41

ST260a

1000

M132677

1000

ST269

1719

M127904

20

M129682

86

M130799

371

M132035

1117

M132317

125

x1

August 20, 2015 2:36:15 PM

135824

D206-642-251

Required Date: 8/31/2015

Required Qty: 1.00

all of them

Loc Code

4

2

2

50

1

1

4

1

16

27

August 20, 2015 2:36:15 PM

ITEM	Qty -041	Qty -043	Part Number	Description
1	X		D3804-041	SKIDTUBE ASSEMBLY, 206 A/B LOW
2		X	D3804-043	SKIDTUBE ASSEMBLY, 206 A/B HIGH
5	1	1	D2600-1-160	EXTRUSION
6	1	1	D2646	AFT CAP
7	1	1	D2647	CAP
8	19	20	D2649	CROSS BOLT SPACER
9	6	8	D2651-1	PLUG
10	6	8	D2651-3	O-RING
11		1	D2654-3	WEB
12	1		D2654-1	WEB
13	1	1	D2680-041	NUT PLATE
14	2	2	D3286-1	DOUBLER
15	2	2	D3286-3	STUD
21	2	2	AN960JD10L	WASHER
22	1	1	AN960JD416	WASHER
23	2	2	CCR264SS3-3	RIVET
24	2	2	CR3212-4-03	RIVET
25	52	52	CR3212-4-04	RIVET
26	2	2	MS27039-1-08	SCREW
27	1	1	MS27039-4-06	SCREW

NOTES

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 12.5 lb
- 9) WELD PER DART QSI 004
- 10) BENDING: DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 11) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 12) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

DEO ATTACHED

RELEASED

20150820

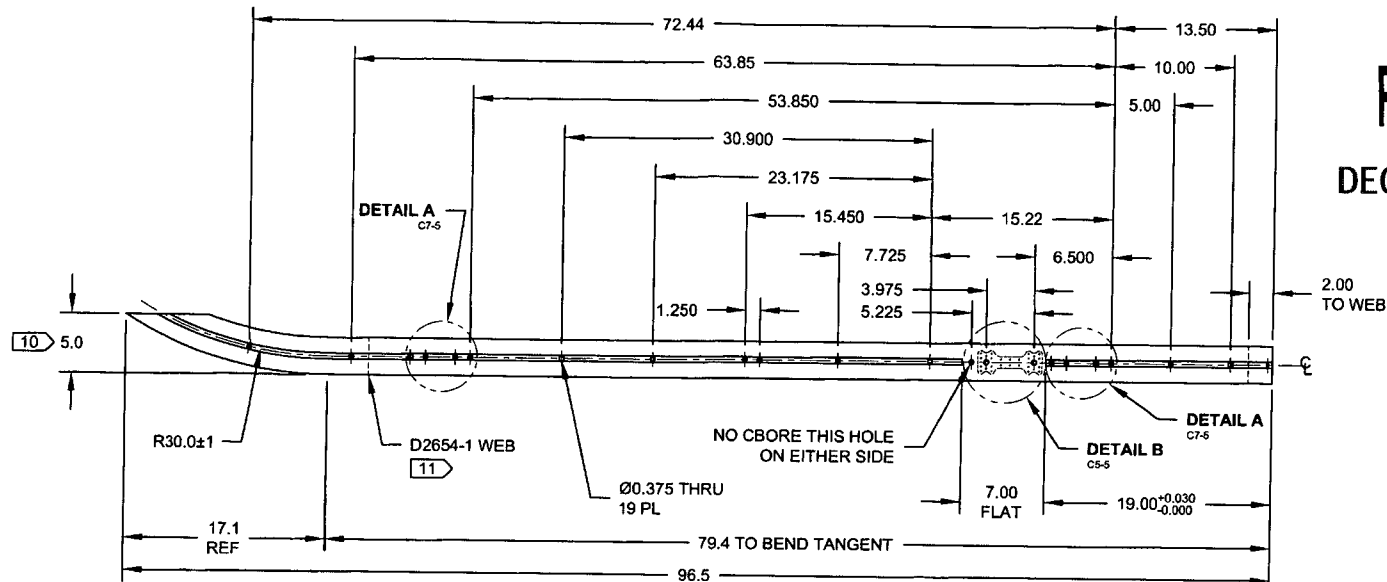
SK 135824

080707

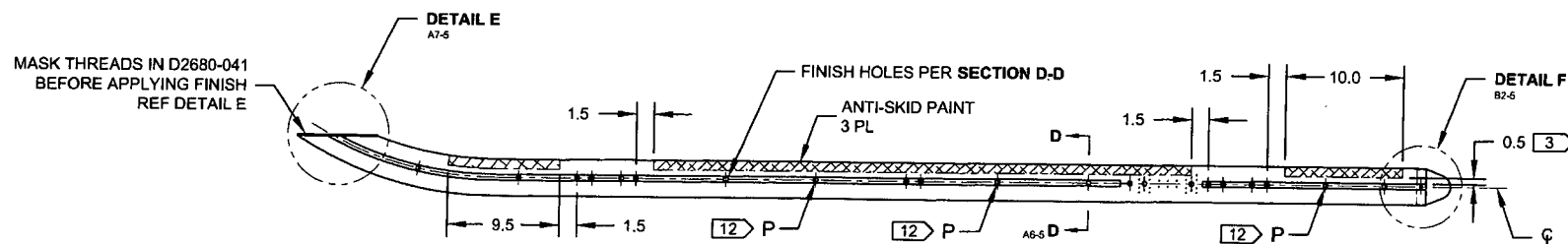
A	NEW ISSUE	MB	08.07.07
REV.	DESCRIPTION	BY	DATE
DESIGN	99	DART AEROSPACE USA, INC	
DRAWN	1	PORT HADLOCK, WA	
CHECKED	1	DRAWING NO.	REV. A
MFG. APPR.	1	D3804	SHEET 1 OF 5
APPROVED	1	TITLE	SCALE
DE APPR.	1	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
09.03.03

DEO ATTACHED



D3804-041 BENDING/DRILLING DETAIL

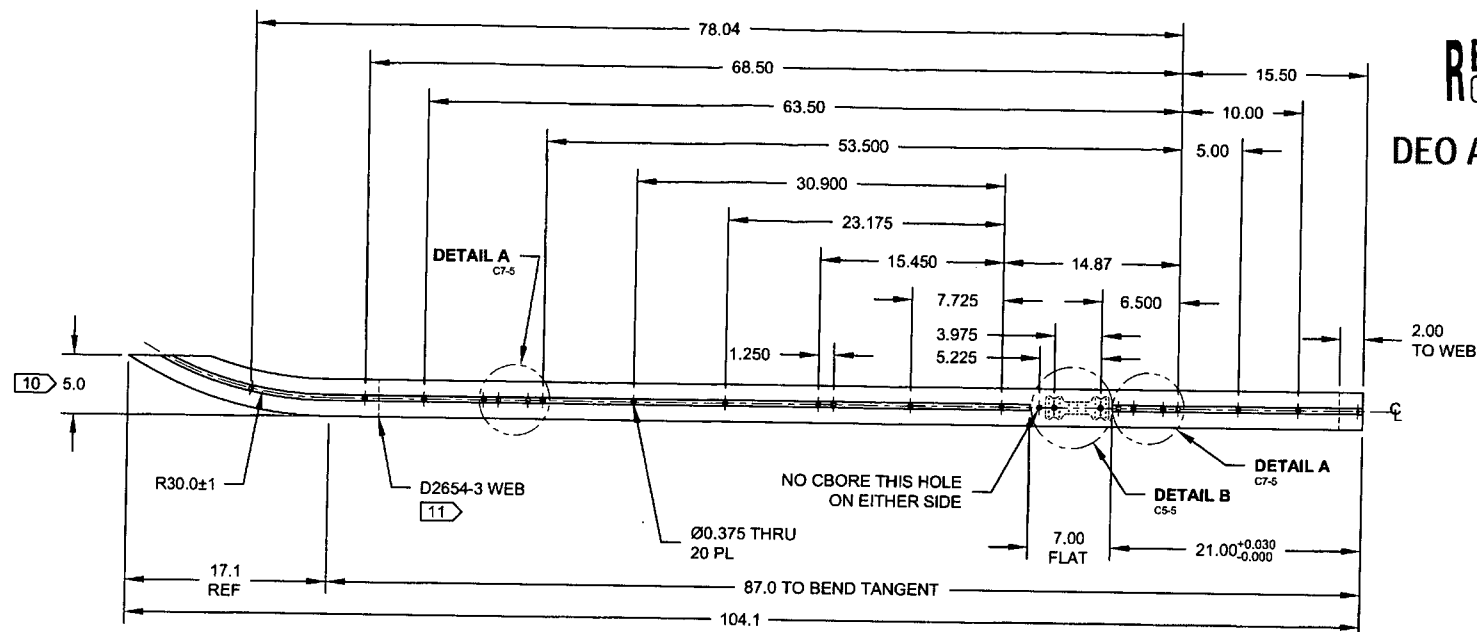


D3804-041 ASSEMBLY/FINISHING DETAIL

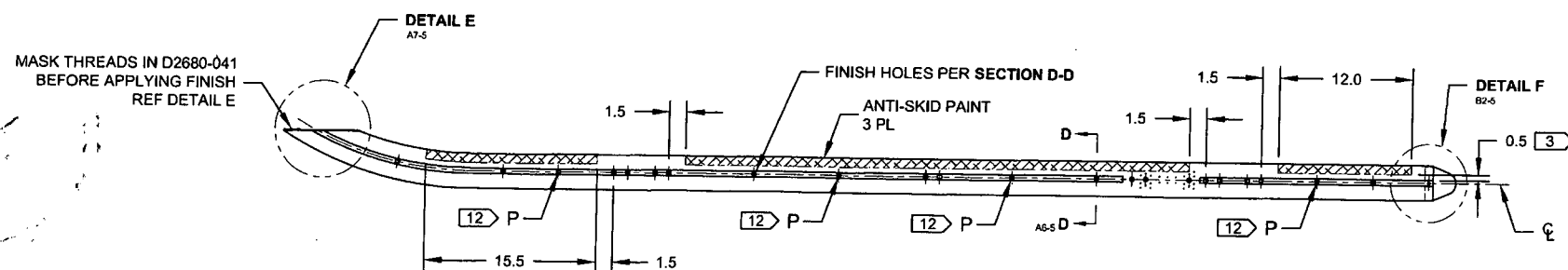
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DRAWN	91	PORT HADLOCK, WA	
CHECKED	91	DRAWING NO.	REV. A
MFG. APPR.	91	D3804	SHEET 2 OF 5
APPROVED	91	TITLE	SCALE
DE APPR.	91	SKIDTUBE ASSEMBLY, 206A/B	NTS
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RELEASED
09.03.03

DEO ATTACHED



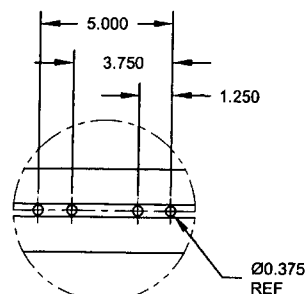
D3804-043 BENDING/DRILLING DETAIL



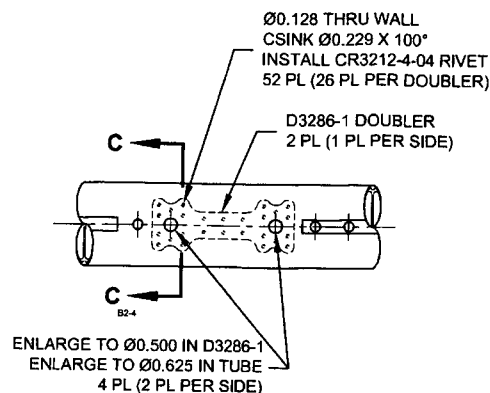
D3804-043 ASSEMBLY/FINISHING DETAIL

DESIGN	93	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	93	DRAWING NO.	REV. A
MFG. APPR.	B	D3804	SHEET 3 OF 5
APPROVED	100	TITLE	SCALE
DE APPR.	11	SKIDTUBE ASSEMBLY, 206A/B	NTS
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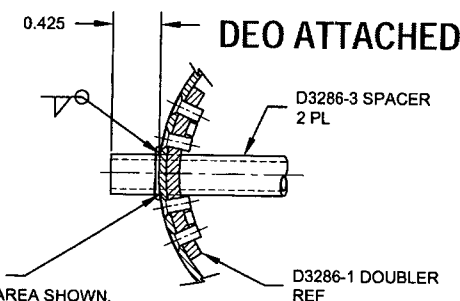
RELEASED
UP 09.03.03



DETAIL A D6-2
SCALE NONE C2-2
D6-3
C2-3

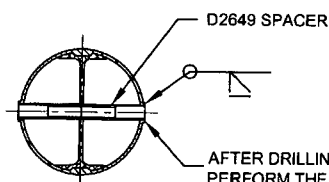


DETAIL B C3-2
SCALE NONE C3-3



- TO INSTALL D3286-1/-3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH OUTSIDE SURFACE OF ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.03 X 45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

SECTION C-C C6-4
PARTIAL SECTION
SCALE NONE

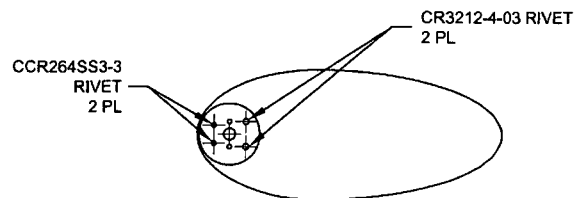


SECTION D-D A4-2
FOR Ø0.375 HOLES ONLY A4-3
SCALE NONE

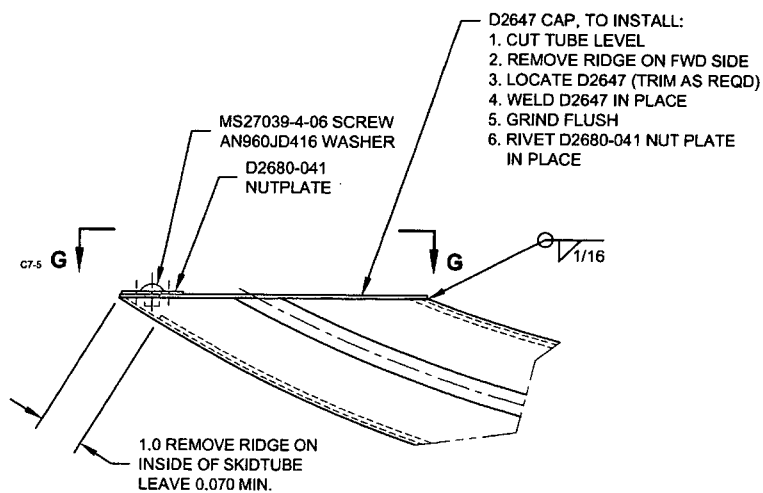
DESIGN	91	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	P	DRAWING NO.	REV. A
MFG. APPR.	E	D3804	SHEET 4 OF 5
APPROVED	49	TITLE	SCALE
DE APPR.	H	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

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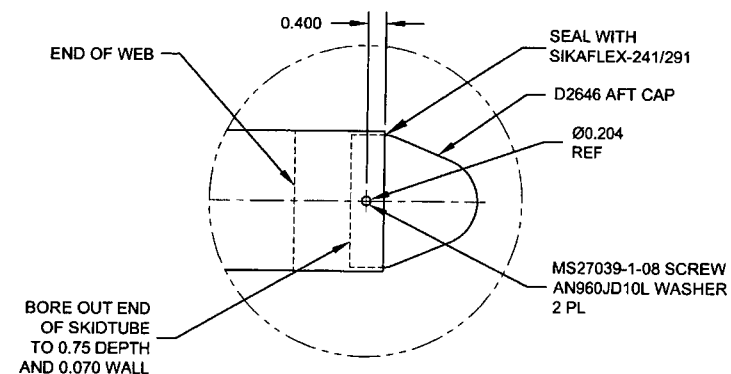
DEO ATTACHED



VIEW G-G
SCALE NONE
A7-5



DETAIL E
SCALE NONE
B7-2
B7-3



DETAIL F
SCALE NONE
B2-2
B2-3

DESIGN	47	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	47	DRAWING NO.	REV. A
MFG. APPR.	B	D3804	SHEET 5 OF 5
APPROVED	47	TITLE	SCALE
DE APPR.	47	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC	
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DRAWING NO. D3804	TITLE SKIDTUBE ASSEMBLIES, 206A/B	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3804-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>OP</i>	CHECKED <i>A.P.</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 12.10.12	DATE 12.10.22	DATE 12.10.22	DATE 12.10.22		DATE 12.10.22		

PURPOSE:

CHANGE C'BORED WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

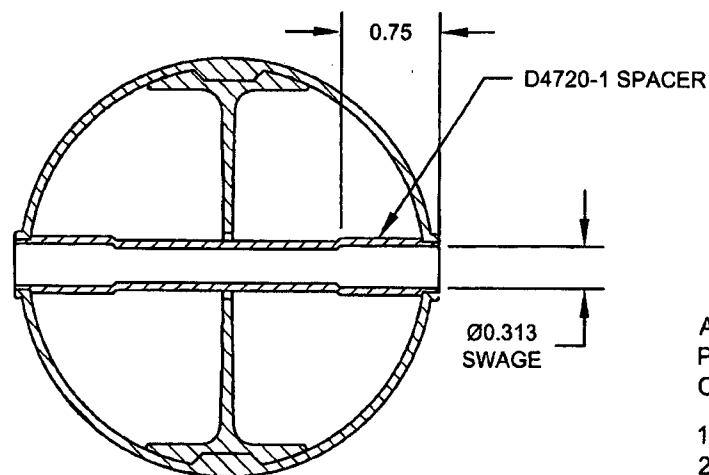
IS:

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-043		
1	1	D2649	CROSS BOLT SPACER
18	19	D4720-1	SPACER

WAS:

19	20	D2649	CROSS BOLT SPACER
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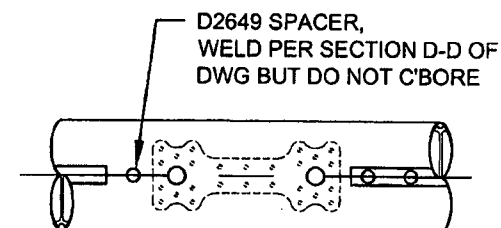
ADD SECTION H-H BELOW, WHICH IS THE SAME SECTION VIEW AS SECTION D-D OF DWG.
C'BORED HOLES ARE **NOW SWAGED** PER SECTION H-H BELOW. FOR THE Ø0.375 HOLE THAT IS NOT C'BORED, WELD PER SECTION D-D OF DWG (SEE AMENDED DETAIL B FOR REFERENCE).



SECTION H-H

FOR Ø0.375 HOLES ONLY

FOR HOLES THAT ARE CURRENTLY C'BORED ONLY
NOT TO SCALE



DETAIL B

AMENDMENT TO DETAIL B
NOT TO SCALE

RELEASE
2012-11-16
[Signature]

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES THAT ARE
CURRENTLY C'BORED:

1. INSERT D4720-1 SPACER, 18 PL (-041) OR 19 PL (-043)
2. SWAGE TO Ø0.313 X 0.75 DP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002